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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/403,338 | 10/19/1999 | SEINOSUKE HORIKI | 2710/60471 | 7137 |

7590 09/21/2004

COOPER & DUNHAM
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

| EXAMINER | |
|---|---|
| KRUER, KEVIN R | |
| ART UNIT | PAPER NUMBER |
| 1773 | |

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Advisory Action | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/403,338 | HORIKI ET AL. | |
| | Examiner | Art Unit | |
| | Kevin R Kruer | 1773 | |

*--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

THE REPLY FILED 03 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *see attached*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *NONE*.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1, 3, and 5-8*.

   Claim(s) withdrawn from consideration: *10 and 12*.

8. ☒ The drawing correction filed on *19 October 1999* is a)☒ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

D. S. NAKARANI
PRIMARY EXAMINER

***Advisory Action***

Applicant's arguments filed September 3, 2004 have been fully considered but are not persuasive.

The current claims are drawn to a porous material impregnated with a phenolic resin wherein the phenolic resin is both (1) at least partially sulfomethylated and/or sulfimethylated and (2) at B-stage of polymer condensation. Applicant argues that said phenolic resin surprisingly gives the claimed material increased moldability, storage life, and heat resistance as compared to phenolic resins that are either sulfomethylated or at B-stage of polymer condensation, but not both. According to applicant, the test submitted with the amendment mailed September 5, 2003 demonstrates that the claimed material exhibits said improved properties. The examiner has fully considered the test, but maintains the position that said properties are not unexpected. Specifically, Yuka'609 teaches that sulfomethylated or sulfimethylated phenolic resins exhibit improved heat resistance and moldability (paragraph 0033). Furthermore, Taylor explicitly teaches that the polymerization of a thermosetting polymer impregnated in a material should be advanced to the B-stage, because an impregnated material can be stored for a reasonable length of time in that state (col 1, lines 18+). The improved moldability, storage life, and heat resistance exhibited by the claimed material are, therefore, not considered unexpected because one of ordinary skill in the art would expect the claimed resin to exhibit said properties.

Applicant argues that there is nothing in the prior art that would have predicted sulfomethylation of condensation polymer would improve the polymer's stability with

respect to advancing to the B-stage, i.e. the porous material stays at the B-stage without advancing to the C-stage for a long time so that good moldability and high bonding strength is ensured. Specifically, Applicant argues that the teachings of Yuka with respect to improved storage life are drawn to the stability of the condensation polymer in an aqueous solution, not the stability of an impregnated porous material. The examiner respectfully disagrees. The Yuka references teach that sulfomethylated phenolic resins are more stable (see Derwent abstracts). Furthermore, Taylor explicitly teaches that the polymerization of the thermosetting polymer impregnated into a material should be advanced to the B-stage, because the impregnated material can be stored for a reasonable length of time in that state (col 1, lines 18+). Thus, the results obtained by Applicant are not unexpected.

Applicant further argues that the examiner has failed to establish a prima facie case of obviousness because the combination of the Yuka references in view of any of Taylor, Benzinger, Casadevall, Franz, or Burke does not teach or suggest all the elements of the rejected claims. Applicant argues that the combination of the prior art fails to render obvious a phenolic resin that is both (1) at least partially sulfomethylated and /or sulfimethylated and (2) at B-stage of polymer condensation. While the examiner concedes that no single reference teaches the advantage of B-stage curing a phenolic resin that is at least partially sulfomethylated and/or sulfimethylated, the examiner maintains the position that the combination of references as applied above renders the claimed material obvious for the reasons stated in the Office Action mailed September 24, 2003. Specifically, the Yuka references teach porous materials impregnated with

sulfomethylated and/or sulfimethylated condensation resins. The secondary references teach the advantage of advancing the curing of such resins to the B-stage. Since Applicant provides no argument as to why the combination of art fails to render obvious the claimed invention, the rejection is maintained.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K-R K-

Kevin R. Kruer
Patent Examiner-Art Unit 1773

D. S. NAKARANI
PRIMARY EXAMINER